



Applied Plant Anatomy Lecture series

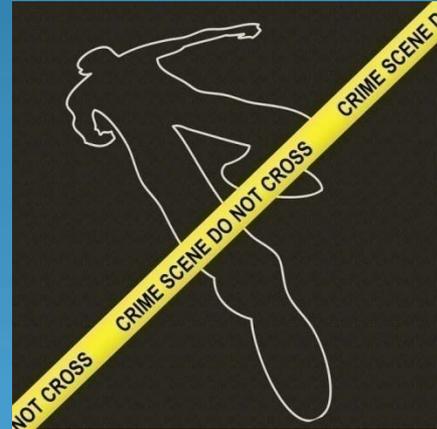
Forensic Botany



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Crime Scene Botanicals: How Plants Are Used In Forensics



Forensic Botany



Forensic Botany is the use of plants and natural material in the area of a crime to help solve the crime.

Forensic Botany is very similar to DNA fingerprinting on humans.

Scientists feel plants should be used more often to solve crimes because they are always in the background.

Uses of Forensic Botany and Fun Facts:



- To determine how long a body has been in a certain spot, by calculating the weight of the body and how much damage is done to the plants underneath
- Are there any dragging marks or footsteps in the grass etc. to determine if a body has been moved
- Leaves, dirt, fruit, pollen, and seeds attached to the clothes of the suspect and victim helping to determine who could have been where by the places different plants grow
- Forensic Botany did not become an actual way of solving cases until the 1930's
- Its used in Brittan and New Zealand more then anywhere in the world

Charles. A. Lindbergh, Jr. Kidnapped



WANTED

INFORMATION AS TO THE
WHEREABOUTS OF



CHAS. A. LINDBERGH, JR.

OF HOPEWELL, N. J.

SON OF COL. CHAS. A. LINDBERGH

World-Famous Aviator

This child was kidnaped from his home in Hopewell, N. J., between 8 and 10 p. m. on Tuesday, March 1, 1932.

DESCRIPTION:

Age, 20 months Hair, blond, curly
Weight, 27 to 30 lbs. Eyes, dark blue
Height, 29 inches Complexion, light
Deep dimple in center of chin
Dressed in one-piece coverall night suit

ADDRESS ALL COMMUNICATIONS TO

COL. H. N. SCHWARZKOPF, TRENTON, N. J., or
COL. CHAS. A. LINDBERGH, HOPEWELL, N. J.

ALL COMMUNICATIONS WILL BE TREATED IN CONFIDENCE.

March 11, 1932

COL. H. NORMAN SCHWARZKOPF
Supt. New Jersey State Police, Trenton, N. J.

Chas. A. Lindbergh Jr. was kidnapped from his home in New Jersey on Tuesday, March 1, 1932 when he was twenty months old. Two months later the boy's body was found a short distance from the family's home. He was determined to have died from a large skull fracture caused by a blow to the head. One of the biggest pieces of evidence was a ladder built by twine and wood used to climb through the toddlers window. The ladder was made by old beams and rope found in the suspects attic.

Kidnapped Contd.

After determining many suspects, with warrants the police searched the suspects homes. When they searched the house of Bruno Richard Hauptman they found wood beams and tested them. They found that the wood slats from both sites were from the same wood beams that Hauptman had in his attic. Hauptman was sentenced to death for the abduction and murder of Charles Augustus Lindbergh Jr.



Hauptman claimed innocent to the end.



Pollen – It's Everywhere

Pollen is all over us, all the time. It moves through the air all the time by the wind. Eventually landing on the ground, it is called Pollen Rain.



Pollen and spores are microscopic and can become trapped on almost any type of fabric. Most pollen is so small it is invisible to our eyes without a microscope. So a person has no idea if they have this microscopic pollen on their clothes. This makes it almost impossible for a criminal to remove all evidence of pollen in their clothes.



More Pollen!



Don't think you can just wash the pollen out with heavy duty soap. Most pollen and spores are hard to destroy and they don't easily decay. This means that pollen evidence from a crime scene can remain intact for up to hundreds of years.

Pollen is also used to determine what time of the year a crime was committed because only in pollen seasons does pollen cover everything in a layer of yellow. So if an object is covered in pollen there are not many months that the crime could have taken place.



Under-used Crime Solver



Although Forensic Botany has been used to solve few cases, it is still not used to its abilities. Many people have not heard of using plant life to solve crimes. The reason people don't use botany to solve cases is because of the critical steps needed to use the information like collection, preservation, and documentation. These are all important additions needed to correctly take the information needed. These important steps are the reasons why so many police departments do not use the great invention of **Forensic Botany**.

Dr. David Hall

Dr. David Hall is famous Forensic Botanist. He has been a botanist for many years and after his assistance being called for so long, he set up his own consultancy in the forensic botany field. Dr. Hall's consultancy was originally based out of Florida. In the year 2000 he was added to the list of Outstanding Scientists of the 20th century.



Dr. Dallas Mildenhall

Dr. Dallas Mildenhall a Forensic Palynologist (someone who studies pollen) was one of the ones responsible for introducing the technique of Forensic Botany to the world in the 1970's.

Forensic Botany Main Ideas



- Courts have become aware that Forensic Botany can help in civil cases
- Botany is the use of plants to solve crimes
- Pollen is very difficult to remove from clothes and surrounding resources
- Forensic Botany has not been widely used in the United States
- Forensic Botany is used like fingerprinting humans

